

Delta Diablo Sanitation District

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February 16, 2011

VIA ELECTRONIC MAIL

Ms. Terry Macaulay Deputy Executive Officer Delta Stewardship Council 980 Ninth Street, Suite 1500 Sacramento, CA 95814

SUBJECT:

COMMENTS ON NOTICE OF PREPARATION FOR THE DRAFT

ENVIRONMENTAL IMPACT REPORT FOR THE DELTA PLAN

Dear Ms. Macaulay:

The Delta Diablo Sanitation District (DDSD) submits this letter in response to the December 10, 2010 Notice of Preparation for the Environmental Impact Report (EIR) for the Delta Plan issued by the Delta Stewardship Council. The comments provided are consistent with previous comments submitted to the Bay Delta Conservation Planning (BDCP) process.

DDSD is located at the western edge of the statutory Delta and provides wastewater treatment services to a population of approximately 200,000, as well as provides recycled water service to two major power plants that have a capacity to serve over 1 million homes. DDSD's Strategic Plan gives priority to the development of long term sustainable resource development projects that further the District's commitment to progressive environmental stewardship. To that end, the District has taken a leadership role in a 14-agency coalition that has secured a federal partnership to deliver 30,000 acre-feet of recycled water in the Bay Area with an additional 40,000 acre-feet in the project planning and design phase. In addition, the District is taking a lead role in a 16-agency coalition that is developing a biosolids to energy project that is envisioned to provide an alternative biosolids disposal option that will process biosolids into a green renewable energy supply for the Bay Area, while reducing greenhouse gas impacts.

DDSD recognizes that there likely is not one individual solution that will adequately address the environmental challenges that the Delta faces. All solutions should be explored, including re-operations of the State and Federal projects; decreasing water supply obligations through conservation, water transfers, and recycling; increased storage; engineered solutions to redirect flows, etc. One solution that should be included in the planning and environmental review of any forward planning in the Delta is the development of a new water supply from the western part of the Delta. Such a water supply could be fish "friendly" by diverting water during times when protected species have moved into the Delta interior; less energy intensive than a traditional ocean desalination supply alternative since the western Delta is brackish; be an "on-demand," new water supply that does not require storage; and be located in a region where there are existing major diversion points and water transmission facilities.

The feasibility level studies the District has completed to date include a fisheries study prepared by Hanson Environmental and a technical feasibility study prepared by RW Beck, Inc (copies are available upon request). The studies provide the following conclusions:

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- 1) Location of a brackish desalination plant in the western portion of the Delta costs only a third in terms of energy and dollar costs compared to developing a desalination project in the San Francisco Bay or the Pacific Ocean. The main reason this is true is because the salinity fluctuations are a third or less than the other two water sources (i.e., the TDS in the western Delta ranges from 500 mg/l to 14,000 mg/l, while the Bay and Ocean TDS are 30,000 mg/l). Depending on the partners investing in the project, the cost to construct and operate a project varies from approximately \$500/acre-foot to \$900/acre-foot. A key concept regarding this cost is that it is for a NEW, on-demand water supply compared to other alternatives under consideration that do not provide additional water supplies.
- 2) The water from a brackish water desalination facility can be treated to any level desired, from bottled water quality for human consumption to a very much improved low salinity water supply for agricultural purposes. Generating and utilizing a high quality, low salinity water source helps to decrease the salinity levels in outfalls and/or runoff.
- 3) An intake in the western part of the Delta can be operated in a fish-friendly way by installing state-of-the-art fish screens and avoiding pumping periods when protected aquatic species cannot be adequately screened (i.e., during the egg and larvae stage).
- 4) Brine disposal is feasible in the western portion of the Delta by exporting the brine further to the west where salinity levels raise dramatically as the Delta empties into the Bay (i.e., a desalination project does not add mass, but does increase concentration).
- 5) A brackish desalination project is scalable in the western portion of the Delta and could be considered as a supplemental water supply for the Bay Area, or a water supply component for other water users of the State and Federal water projects. Preliminary capital cost estimates (completed in 2006) indicate that a five million gallon per day (MGD) project could be constructed for approximately \$25 million, a 50 MGD project for \$250 million and up to a million acre foot/year project for \$3.5 billion. A major benefit of a brackish desalination project in the western Delta is that it is drought proof and requires no new storage.

Thank you for this opportunity to comment on the Delta planning process. DDSD's location and existing publically-owned assets could prove to be very strategic in the development of a new water supply in the western Delta. Please do not hesitate to call me at (925) 756-1920.

Sincerely,

Gary W. Darling General Manager

GWD:di

cc:

DDSD Board of Directors
District File RWF.CORRES-13
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